

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) Illumination system, comprising a radiation source and a fluorescent material comprising at least one phosphor capable of absorbing a part of light emitted by the radiation source and emitting light of wavelength different from that of the absorbed light; wherein said at least one phosphor is a cerium-activated carbido-nitridosilicate of general formula $(RE_{1-z})_{2-a}EA_a$ $Si_4N_{6+a}C_{1-a}:Ce_z$ wherein $0 \leq a < 1$, $0 < z \leq 0.2$, EA is at least one earth alkaline metal selected from the group of calcium, strontium and barium, and RE is a least one rare earth metal chosen from the group of yttrium, gadolinium and lutetium.

2. (Original) Illumination system according to claim 1, wherein

the radiation source is a light emitting diode.

3. (Original) Illumination system according to claim 1, wherein the radiation source is selected from the light emitting diodes having an emission with a peak emission wavelength in the range of 400 to 480 nm and wherein the fluorescent material comprising a cerium-activated carbido-nitridosilicate of general formula $(RE_{1-z})_{2-a}EA_a Si_4N_{6+a}C_{1-a}:Ce_z$ wherein $0 \leq a < 1$, $0 < z \leq 0.2$, EA is at least one earth alkaline metal selected from the group of calcium, strontium and barium, and RE is a least one rare earth metal chosen from the group of yttrium, gadolinium and lutetium.

Claim 4-6 (Canceled)

7. (Original) Illumination system according to claim 1, wherein the radiation source is selected from the light emitting diodes having an emission with a peak emission wavelength in the UV range of 200 to 420 nm and wherein the fluorescent material comprises a cerium-activated carbido-nitridosilicate of general

formula $(RE_{1-z})_{2-a}EA_a Si_4N_{6+a}C_{1-a}:Ce_z$ wherein $0 \leq a < 1$, $0 < z \leq 0.2$, and EA is at least one earth alkaline metal selected from the group of calcium, strontium and barium, and RE is a least one rare earth metal chosen from the group of yttrium, gadolinium and lutetium.

Claim 8-11 (Canceled)

12. (Original) Phosphor capable of absorbing a part of light emitted by the radiation source and emitting light of wavelength different from that of the absorbed light; wherein said phosphor is a cerium-activated carbido-nitridosilicate of general formula $(RE_{1-z})_{2-a}EA_a Si_4N_{6+a}C_{1-a}:Ce_z$ wherein $0 \leq a < 1$, $0 < z \leq 0.2$, EA is at least an earth alkaline metal chosen from calcium, strontium and barium and RE is a least one rare earth metal chosen from the group of yttrium, gadolinium and lutetium.

13. (Original) Phosphor according to claim 12, wherein said phosphor additionally comprises a co-activator selected from the group of praseodymium and samarium.

14. (Original) Phosphor according to claim 12, wherein said phosphor is a cerium-activated carbido-nitridosilicate of general formula $Y_2Si_4N_6C:5\%Ce$.

15. (Original) Phosphor according to claim 12, wherein the phosphor has a coating selected from the group of fluorides and orthophosphates of the elements aluminum, scandium, yttrium, lanthanum gadolinium and lutetium, the oxides of aluminum, yttrium and lanthanum and the nitride of aluminum.